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THE MARKET FOR CANNED FRUITS, VEGETABLES, AND JUICES IN PUBLIC SCHOOLS

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Background

The school outlet is an important segment of the away-from-home eating market, which will grow in importance as the pupil population increases and as new schools are constructed with modern cafeteria facilities.

About five out of every six public schools which have a food service participate in the National School Lunch Program. This is a program jointly administered by the U. S. Department of Agriculture and State educational agencies which provide food assistance to schools operating a nonprofit food service for children. Schools participating receive food assistance in the form of cash and commodity donations to help them serve well-balanced, low-cost lunches.

Information relating to canned fruits, vegetables, and juices, as well as to all other foods, was obtained through a survey of a national probability sample of public schools having a food service. The survey covered a 1-year period beginning July 1957 and ending June 1958. A basic purpose of the study was to determine the quantities and wholesale value of the different foods delivered, for public schools, both purchased and donated, and the buying practices and market channels used in acquiring food. The study was further designed to develop benchmarks for food processors, manufacturers, and distributors by which to gage the size of the market for the different foods utilized in school lunch operations, and to assist Department, State, and local officials in evaluating and improving feeding operations in schools in terms of the kinds and quantities of food acquired.

Size of the School Market

Approximately 60 thousand of the 106 thousand public elementary and secondary schools in the United States provide a noonday food service, ranging from a complete plate lunch to a la carte only. During the survey period, July 1957-June 1958, it was estimated that the average daily attendance in public schools providing a food service was slightly over 21 million children.

During the survey period, the total monetary value of food, both purchased and donated, delivered to schools having a food service amounted to $597 million, or about $28 per child, based on average daily attendance. About $505 million or 85 percent of the total value of food moved into the school market was acquired from local sources. The remaining portion, or 15 percent of the

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total dollar value, comprised commodities donated directly by the Government from purchases made especially for the school lunch program or from stocks acquired under various price stabilization or surplus removal programs. In this connection, any school having a nonprofit food service may receive commodities acquired by the Government under price stabilization or surplus removal programs. Commodities acquired with funds especially designated for the National School Lunch Program, however, are confined solely to those schools participating in the program.

The results of this survey indicate that the school market is primarily a local one; and that the role of Government is relatively small in supplying most commodities to the school outlet. Through the National School Lunch Program, commodities can be introduced on a nationwide basis whereby new foods or familiar foods in new form are presented to some children, enhancing, perhaps, the size of the market for certain commodities.

Quantities of Canned Fruits, Vegetables and Juices

Fruit.--Public schools with feeding services received 179 million pounds of canned fruits during the 12-month period, including both purchased and donated items. This quantity made available for consumption 8.3 pounds per child, based on average daily attendance figures of slightly over 21 million children in schools having food services. One of the most popular items in the school lunch menu, canned peaches, accounted for about 52 million pounds, or 29 percent of the total canned fruits. About 5 percent of the 1957-58 total peach pack, including freestone and clingstone varieties, moved into the school market. Most of the peaches used in school feeding programs were of the clingstone type.

Another popular fruit item was canned apples, mostly applesauce, with 36 million pounds delivered to the school outlet. Other fruit items moving in substantial quantities to the school market included 17 million pounds of pineapple, about 15 million pounds of cherries, and 14 million pounds each of pears and fruit cocktail and other mixed fruits. Cherries delivered to schools accounted for about 9 percent of the total pack in the United States during the period studied. Plums and apricots each accounted for about 6 million pounds of the total canned fruits delivered to this outlet.

Of the total canned fruit delivered to schools, approximately 136 million pounds or 76 percent were acquired from local merchants. The largest single canned fruit product donated by the Government was canned peaches, totaling about 26 million pounds or half the quantity of peaches delivered to schools. Another canned fruit item donated in substantial quantity was canned cherries, roughly 8 million pounds. These two, canned peaches and cherries, were donated only to schools participating in the National School Lunch Program. A small quantity of other fruit items shown as being donated included plums. This was evidently carried over from supplies acquired in the preceding school year.

Vegetables.--Almost 279 million pounds of canned vegetables, excluding potatoes and sweetpotatoes, were delivered to public schools between July 1957 and June 1958, making available for consumption 13 pounds per child in schools having food services. The most popular vegetable items included green beans,

green peas, tomatoes, and corn. The popularity of these 4 items is reflected in their movement to schools--green beans, 60 million pounds; green peas, 50 million pounds; tomatoes, 43 million pounds; and slightly over 37 million pounds of corn. The proportion of the 1957-58 total pack of these 4 vegetables that moved into schools varied from 4 to 8 percent. Other important canned vegetables, although of lesser volume, included baked beans, beets, spinach, and carrots. Canned vegetables not individually identified in the survey accounted for almost 31 million pounds.

Almost 241 million pounds or 86 percent of the canned vegetables going to the school market were acquired in commercial channels at the local level. Of the donated items, canned tomatoes were the largest in volume, about 17 million pounds, followed by canned peas with almost 11 million pounds and canned green beans with somewhat over 9 million pounds. The donated tomatoes, peas, and beans went to schools participating in the National School Lunch Program, since funds utilized in acquiring these items had been especially appropriated for such purposes.

Juices.--The quantities of canned single-strength citrus, deciduous, and vegetable juices delivered to schools were listed in units in which they appeared on the vouchers and converted to pounds for purposes of comparability. In total, 9-1/2 million pounds of canned single-strength juices went into the school market, mostly tomato juice and orange juice. Tomato juice and orange juice each represented about 3-1/2 million pounds or, combined, about 75 percent of total single-strength juice. In terms of volume, next in importance were pineapple juice, grapefruit juice, and apple juice.

All canned single-strength juices delivered to the school outlet were purchased in the local market through established commercial channels. According to the survey findings, there was a very small quantity of concentrated orange juice donated in the survey period; this was, perhaps, a delivery made from supplies acquired late in the preceding school year.

Value of Canned Fruits, Vegetables, and Single-Strength Juices

Fruits.--The monetary value of canned fruits delivered to public schools having a food service was $28 million or about $1.30 per child. Together, peaches and apples, the big volume items in the canned fruit category, accounted for close to one-half the value of all canned fruits. Pineapple had a relatively large share of the total value of canned fruits, about 11 percent.

The monetary value of canned fruits purchased by individual schools or school systems came to about $23 million. Combined, apples (mostly applesauce), peaches, pineapple, fruit cocktail, and mixed fruits comprised approximately two-thirds of the monetary value of purchased canned fruits. Peaches and cherries accounted for the lion's share of the dollar value of donated items, somewhat over $4 million.

Vegetables.--For canned vegetables, the monetary value of deliveries amounted to $36 million, about $1.68 per child. The volume items, beans, peas, corn, and tomatoes, collectively, accounted for almost 71 percent of the total dollar value of canned vegetables in this outlet. About $32 million of the total value of deliveries of canned vegetables was obtained in commercial channels.

Juices.--In comparison to canned fruits and vegetables, the monetary value of juice deliveries was relatively minor, slightly over one million dollars. Canned orange juice made up slightly over one-third of the total value.

Collectively, including both purchased and donated, canned fruits, vegetables, and juices made up 11 cents of each school food dollar. It is anticipated that the percentage value of the school food dollar for these items would tend to be relatively stable in the years ahead.

Sources of Supply and Buying Practices

When the characteristics of a market are being appraised, it is helpful to have information relating to the usual sources of supply and the particular procedures followed in obtaining food requirements. As a part of the survey, information on sources of supply and buying practices was sought from school-food buyers. Practically all canned fruits, vegetables, and juices were acquired directly from a processor or wholesaler. Approximately one-fourth of the expenditures for canned fruits and vegetables was made through competitive bids, that is, by obtaining verbal or written price quotations from two or more suppliers before placing an order. As was found for most other commodities, route salesmen played an important role in supplying the needs of school-food buyers for canned fruits and vegetables.

School and Community Characteristics in Relation to Deliveries of Canned Fruits, Vegetables, and Juices

The percentage distribution of the per capita value of food by school and community characteristics provides an indication of the market profile for the school outlet. The per capita value of canned fruits and vegetables received in elementary schools was substantially larger than that found in high schools. This may have been due in part to a larger proportion of plate lunches eaten by children in the lower grades. There was basically little difference in per capita values of fruits and vegetables received by size of school based on pupil enrollment. In schools serving areas where the average annual family income was under $4,000, the per capita value of canned items was larger than in schools located in areas having a higher economic level.

Schools located in communities of under 2,500 people had a higher per capita value for canned fruits, vegetables, and juices than those located in more heavily populated areas. In this connection, the combined per capita value of frozen fruit and vegetable deliveries to public schools was larger in the high income and urban areas than in those where the average family income was $4,000 or under and population was 2,500 or less. In those schools participating in the National School Lunch Program, the per capita value of the canned products was over two times larger than in nonparticipating schools.